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STATE OF SOUTH CAROLINA)

(Caption of Case))
Petition of the Office of Regulatory Staff to Establish)
Dockets to Consider Implementing the Requirements)
of Section 1251 (Net Metering and Additional)
Standards) of the Energy Policy Act of 2005)

BEFORE THE
PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

COVER SHEET

DOCKET
NUMBER: 2005 - 385

RECEIVED
2006 MAR 28 PM 1:24
SC PUBLIC SERVICE COMMISSION

(Please type or print)

Submitted by: FRANK KNAPP JR. SC Bar Number:
Address: 1717 GERVAIS ST. Telephone: 803-252-5733
COLUMBIA, SC 29201 Fax: 803-799-0678
Other:
Email: SBCHAMBER@SCSBC.ORG

NOTE: The cover sheet and information contained herein neither replaces nor supplements the filing and service of pleadings or other papers as required by law. This form is required for use by the Public Service Commission of South Carolina for the purpose of docketing and must be filled out completely.

DOCKETING INFORMATION (Check all that apply)

☐ **Emergency Relief demanded in petition** ☐ **Request for item to be placed on Commission's Agenda expeditiously**

☒ **Other:**

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)		
☒ Electric	☐ Affidavit	☒ Letter	☐ Request
☐ Electric/Gas	☐ Agreement	☐ Memorandum	☐ Request for Certificatio
☐ Electric/Telecommunications	☐ Answer	☐ Motion	☐ Request for Investigatior
☐ Electric/Water	☐ Appellate Review	☐ Objection	☐ Resale Agreement
☐ Electric/Water/Telecom.	☐ Application	☐ Petition	☐ Resale Amendment
☐ Electric/Water/Sewer	☐ Brief	☐ Petition for Reconsideration	☐ Reservation Letter
☐ Gas	☐ Certificate	☐ Petition for Rulemaking	☐ Response
☐ Railroad	☐ Comments	☐ Petition for Rule to Show Cause	☐ Response to Discovery
☐ Sewer	☐ Complaint	☐ Petition to Intervene	☐ Return to Petition
☐ Telecommunications	☐ Consent Order	☐ Petition to Intervene Out of Time	☐ Stipulation
☐ Transportation	☐ Discovery	☐ Prefiled Testimony	☐ Subpoena
☐ Water	☐ Exhibit	☐ Promotion	☐ Tariff
☐ Water/Sewer	☐ Expedited Consideration	☐ Proposed Order	☐ Other:
☐ Administrative Matter	☐ Interconnection Agreement	☐ Protest	
☐ Other:	☐ Interconnection Amendment	☐ Publisher's Affidavit	
	☐ Late-Filed Exhibit	☐ Report	

OK D. Duke
OK D. Duke

STATE OF SOUTH CAROLINA

BEFORE THE PUBLIC SERVICE COMMISSION

DOCKET NO. 2005-385-E

In the Matter of :

Petition of the Office of Regulatory Staff to Establish Dockets to Consider Implementing the Requirements of Section 1251 (Net Metering and Additional Standards) of the Energy Policy Act of 2005

(TESTIMONY OF ARNO FROESE
(ON BEHALF OF PAMELA GREENLAW

Arno Froese
Red Bank Hydro
4694 Platt Springs Road
West Columbia, SC 29170
(803) 755-0974
arno@froese.com

28 March 2008

S.C. Public Service Commission
P.O. Drawer 11649
Columbia, SC 29211

Re: Docket Number 2005-385-E

Dear Commissioners:

Skyrocketing oil prices and green power seem to monopolize the media. Doubtless, energy will be more expensive and scarce in the future. With that in mind, I started to build a hydroelectric power plant on our property in 2004.

My property lies on Lake Pauline, also called Durham Pond, which is fed by the Red Bank creek. The volume of water flowing through our pond has been measured at 40 cubic feet per seconds with a 10-foot head. The entire project was designed and built by myself, my sons, and some of our friends with the assistance of professionals in the field of hydropower, Thomas Brothers Hydro in Covington, Georgia.

Our original intention was to install a 50-horsepower 3-phase induction motor as the generator. However, Mid-Carolina Electric Cooperative (MCEC) informed us that such project would be expensive (at least $45,000). We then changed our plan to produce single-phase current using three 15-horsepower induction motors, which have now been installed, tested, and found to be operating properly within specifications. The power plant will ultimately produce 35 kilowatt at full capacity.

Presently, we have been faced with a problem, namely a $100,000 liability insurance policy requirement by MCEC for our plant. This insurance is to protect Mid-Carolina Electric, their equipment and personal should our power station be the cause of injury or damage. The issue is now being negotiated with the hope of settling it real soon.

Green Power

The next hurdle to producing green power is an attempt to recuperate our investment.

We found the following information regarding net metering, published by World Watch Institute Center for American progress. On page 14 of their publication (excerpts attached), under the heading "Micro Power" this claim is being made: "It is now possible for consumers to sell some of their extra power back to the grid at the same price the

consumer pays for it." Unfortunately, the map published with this article shows that South Carolina is one of the 10 states that are not governed by Net Metering Law.

Because there is no precedence for micro-power in the Midlands, we seem to be blocked each time we attempt to gather helpful information.

Our dilemma

Therefore, in summary, we have two questions: 1). Is South Carolina interested in green power? If not, then we may leave everything the way it is. If, however, the answer is "yes", then it seems logical that there must be informational resources and clear steps for citizens who wish to contribute to green power in the State of South Carolina.

There are expenses involved for the power company and others related to it, but if the government of South Carolina is serious about promoting green power, contributing towards the independence of the U.S. from foreign imports, then we would strongly suggest that immediate steps be taken and laws implemented to encourage citizens throughout the state to produce green power whether hyrdo, solar, wind or other.

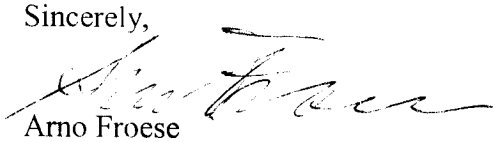
We would be happy to present information regarding our hydropower. Our facilities are open for interested parties to examine our progress and the technology we have utilized to plan, construct, and complete Red Bank Hydro Plant.

Incentives

Based on our experience to this point, and on the prevailing incentives (or, rather the lack thereof) we could not recommend citizens to invest in such an undertaking as ours.

It seems reasonable to expect incentives for producing green power in South Carolina considering that our government has spent multiple millions of dollars in subsidies to support the S.C. tobacco industry, for example. Should we, who invest in green power, not be entitled to the same or similar benefits?

Sincerely,



Arno Froese

Attachments (Excerpts from special report:)

American Energy – The Renewable Path to Energy Security

Published by Worldwatch Institute and Center for American Progress, September 2006

Worldwatch Institute

The Worldwatch Institute is an independent research organization that focuses on innovative solutions to global environmental, resource, and economic issues. The Institute's *State of the World* report has been published in 36 languages and is read annually by prime ministers, CEOs, and thousands of university students. Founded in 1974, Worldwatch's current priorities include transforming the world's energy and agricultural systems to better meet human needs and protect the environment, as well as the broader challenge of building a sustainable global economy.

Worldwatch Institute
1776 Massachusetts Ave., NW
Washington, DC 20036
202-452-1999
www.worldwatch.org

Center for American Progress

The Center for American Progress is a nonpartisan research and educational institute dedicated to promoting a strong, just, and free America that ensures opportunity for all.We believe that Americans are bound together by a common commitment to these values and we aspire to ensure our national policies reflect these values.We work to find progressive and pragmatic solutions to significant domestic and international problems and develop policy proposals that foster a government that is "of the people, by the people, and for the people."

Center for American Progress
1333 H Street, NW, 10th Floor
Washington, DC 20005
202-682-1611
www.americanprogress.org

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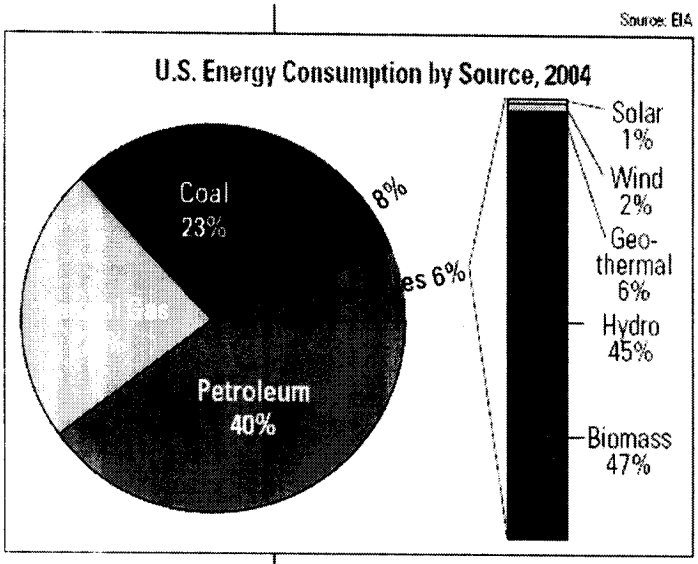

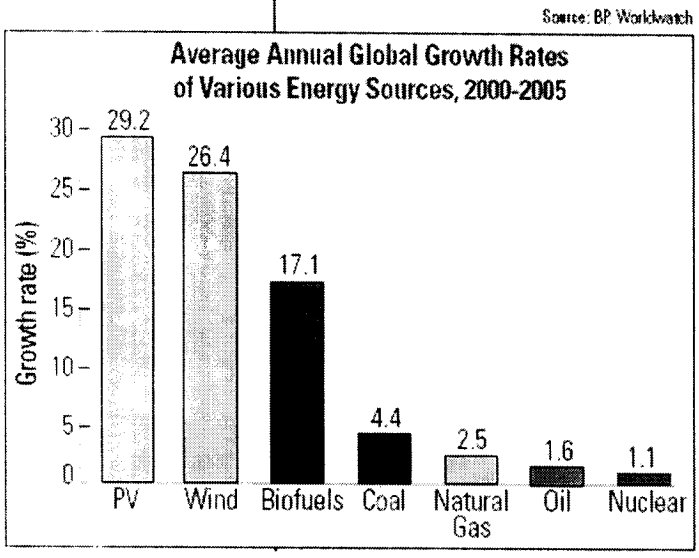

page 14:

Estimated Number of Alternative-Fueled Vehicles in Use in the United States, by Fuel, 2000 and 2004

Fuel	2000	2004
Liquefied Petroleum Gases (LPG)	4,435	9,036
Natural Gas	9,912	4,292
Hydrogen	0	77
Ethanol	600,832	652,779
Electricity	18,172	2,633
Total	**633,351**	**668,817**

Source: EIA

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Micro Power

Although most of today's electricity comes from large, central-station power plants, new technologies offer a range of options for generating electricity where it is needed, saving on the cost of transmitting and distributing power and improving the overall efficiency and reliability of the system. These new options include renewable energy technologies such as rooftop solar cells and bio-fueled generators, as well as devices such as gas turbines and fuel cells that may run on energy sources derived from fossil fuels.

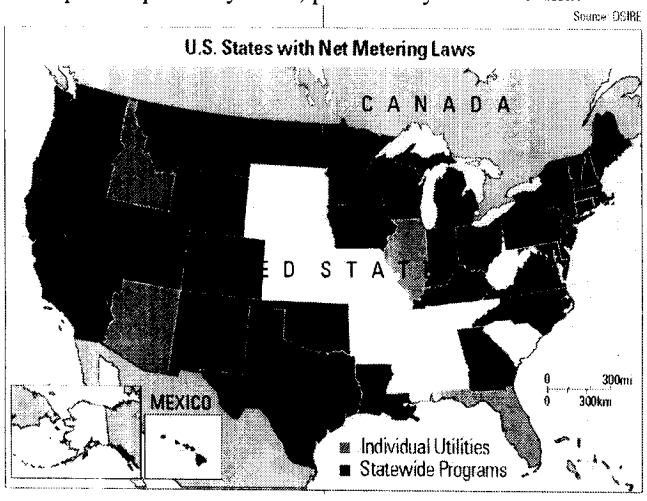
Micro (or distributed) power is in effect a return to the vision of Thomas Edison, who designed small, city-based power plants, the first of which was built near Wall Street in 1882. Economies of scale quickly rendered this approach obsolete, but new technologies that can be mass-produced at low cost are bringing us back to the future.

Locally based generators that connect to local distribution lines generally have generating capacities of 5 MW or less, and are sited in or adjacent to residential, commercial, or public buildings. **These micro power plants provide additional value to the electricity system because they do not require extra investment in transmission or distribution, and they reduce or eliminate line loss.** [emphasis ours] Their popularity is also fueled by the need for reliable power supplies for the electronic equipment that is so central to today's economy. Since most power outages are caused by weather-related damage to power lines, locally based generators can dramatically improve reliability.

Japanese companies have demonstrated that the development of simple, integrated technology packages can quickly and significantly reduce the cost of home-sized solar generators. Recently, U.S. companies have introduced so-called "plug-and-play" solar systems that are modular and elegant—easily integrated into a new or existing building without the need for custom design work. Solar experts believe that as these systems become more standardized, commercial and residential consumers will see the units proliferating in their neighborhoods over the next few years.

One business that has taken advantage of small-scale solar power is the FedEx Corporation. In 2005, FedEx completed a solar electric system atop its hub at Oakland International Airport. The 81,000-square-foot system generates enough electricity to power 900 homes, and provides 80 percent of the facility's peak load while protecting the roof from UV rays and reducing heating and cooling needs.

That micro generators are not widely used today reflects in part the fact that everything from electricity laws to environmental and tax regulations are often structured in ways that disadvantage these technologies. Despite such impediments, businesses and consumers increasingly demand the ability to generate their own power and to sell electricity to other consumers at a fair price. Under "net-metering" laws that have been enacted in several states, **it is now possible for consumers to sell some of their extra power back to the grid at the same price the consumer pays for it.** These laws have helped spur the growing popularity of rooftop solar power systems, particularly in California.



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Costs of Air Pollution

More than 150 million Americans—more than half the nation's people—live in areas where air quality threatens their health.

A 2005 study by the Mount Sinai School of Medicine's Center for Children's Health and the Environment estimated that the cost in lost productivity to the U.S. economy due to mercury's impact on children's brain development totaled $8.7 billion per year.

Researchers at the Harvard University School of Public Health and Brigham and Women's Hospital in Boston found that each 1 microgram decrease in soot per cubic meter of air reduces by 3 percent the U.S. death rates from cardiovascular disease, respiratory illness, and lung cancer—thereby extending the lives of 75,000 people annually.

The city of Atlanta improved public transit and limited downtown vehicle use for the 1996 Olympic Games, cutting peak ozone concentrations by more than 25 percent and reducing by 42 percent the number of asthma acute care events in the Georgia Medicaid claims files.

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Hydropower Generating Capacity in Top 10 U.S. States, 2005

Washington	21,010 MW
California	13,475 MW
Oregon	8,261 MW
New York	5,659 MW
Tennessee	3,950 MW
South Carolina	**3,455 MW**
Georgia	3,313 MW
Virginia	3,091 MW
Alabama	2,961 MW
Arizona	2,890 MW

Source: EIA

CERTIFICATE OF SERVICE

I hereby certify that the following persons have been served with Pamela Greenlaw pre-filed witness testimony of Arno Froese:

Catherine D. Taylor, Senior Counsel
South Carolina Electric and Gas Company
1426 Main Street, M/C 130
Columbia, SC 29201

Catherine E. Heigel, Assistant General Counsel
Duke Energy Carolinas, LLC
Post Office Box 1006, EC03T
Charlotte, NC 28201-1066

John F. Hardaway, Counsel
1338 Pickens Street
Columbia, SC 29201

K. Chad Burgess, Counsel
South Carolina Electric and Gas Company
1426 Main Street, MC 130
Columbia , SC 29201

Len S. Anthony, Counsel
Progress Energy Carolinas, Incorporated
Post Office Box 1551
Raleigh, NC 27602

Mel Jenkins
3324 Montgomery Avenue
Columbia, SC 29205

Nanette S. Edwards, Counsel
Office of Regulatory Staff
1441 Main Street, Suite 300
Columbia, SC 29201

Richard L. Whitt, Counsel
Austin & Rogers, P.A.
Post Office Box 11716
Columbia , SC 29201

Ruth Thomas
1339 Sinkler Road
Columbia, SC 29206

Shannon Bowyer Hudson, Counsel
Office of Regulatory Staff
Post Office Box 11263
Columbia, SC 29211

Frank Knapp, Jr.